CLAIMS

1. A device for hiding the operations performed by a component intended to be integrated into a smart card, characterised in that it comprises at least one means (20, 30, 28, 26) for modifying the current consumption of the said component during the performance of the said operations.

2. A device according to Claim 1, characterised in that the means for modifying the current consumption comprises at least one circuit (30) for integrating the current of the component so as to average the variations in this current over time.

3. A device according to Claim 1, characterised in that the means for modifying the current consumption comprises at least one random signal generator (28) and an array of resistors (20), the power supply to each of the resistors being controlled by the random signals.

4. A device according to Claim 1, characterised in that it comprises a plurality of means (20, 20_1, 30, 30_1) for modifying the current consumption.

5. A device according to Claim 1, characterised in that the means for modifying the current consumption of the component in the case of a memory (14) of the EEPROM type, consists in simultaneously performing:

- an operation of writing to or erasing the memory (14), referred to as a hiding operation, and
- an operation of the microprocessor.

6. A device according to Claim 5, characterised in that, in order to implement a hiding writing

operation, the memory (14) comprises a part (26) dedicated to the recording of a random data item.

7. A device according to one of Claims 1 to 5, characterised in that the activation of the means of modifying the current consumption is controlled by the microprocessor (12) so as to be activated solely for the operations to be protected.

8. A device according to Claim 5, characterised in that the microprocessor (12) performs at least the cryptographic calculation according to the following steps:

- starting of the charge pump,
- presentation of a random data item on the data bus,
- presentation of a writing address on the address bus,
- initiation of the programming,
- performing the cryptographic calculation,
- stopping the programming,
- stopping the charge pump,

so as to mask the footprint of the current consumption occasioned by the said cryptographic calculation.

9. A method for hiding the operations performed by a component, characterised in that it includes the following steps:

- starting of the charge pump,
- presentation of a random data item on the data bus,

- presentation of a writing address on the address bus,
- initiation of the programming,
- performing the cryptographic calculation,
- stopping the programming,
- stopping the charge pump.